

REMARKS

A. The Amendments:

The amendment to the title focuses on the subject matter of the elected claim group, i.e., on fluorinated silsesquioxane polymers (including copolymers) and photoresists containing the polymers. See Section B for applicants' election.

In the claims, claims 67, 71, 73, 85, 91, 92, 94, and 95 have been amended, claims 1-66, 68-70, 72, 74, 77, 78, 82, and 83 have been canceled, and new claims 125 through 159 have been added. Accordingly, claims 67, 71, 73, 75, 79-81, 84-159 are now pending, with claims 111-124 having been withdrawn. All claims, including the amended and new claims are within the elected group, except for withdrawn claims 111-124.

The amendments to claims 67, 71, 73, 85, 91, 92, 94, and 95 are as follows:

Claim 67 has been amended to specify R⁷ as hydrogen and to incorporate the optional linker Q (from previously pending claim 68), wherein Q is arylene, substituted arylene, alkarylene, substituted alkarylene, or C₁-C₄ alkylene optionally substituted with at least one nonhydrogen substituent selected from alkyl and fluoroalkyl (as previously recited in claim 69). Claim 71, 73, and 85 have been amended in light of the amendments to claim 67.

Claim 91 has been amended for clarification, since "alicyclic" groups and linkers are encompassed by the more generic term "cyclic," as is made clear in the specification (see, e.g., lines 6 and 7 of paragraph [0045]). Claims 92 and 94 have been amended in light of the amendment to claim 91.

Claim 95 has been amended to correct a minor and inadvertent error, and claim 99 has been amended solely for clarification.

The new claims are supported as follows:

Claims 125-127 are claims of intermediate scope further defining the subject matter of parent claims 81, 84, and 91, respectively, and supported in the specification at paragraphs [0019] and [0041]-[0044].

Claims 128 and 129 are analogous to claims 91 and 127, but depend from copolymer claim 100.

Claims 130-133 are directed to alkylene, cyclic alkylene, norbornyl or cyclohexyl, or norbornyl linking moieties "L," respectively, as set forth in paragraph [0045].

Claims 134-152 are directed to R¹⁴, and are supported in, for example, paragraph [0045].

Claim 153 is directed to a copolymer which is a subset of the copolymer recited in claim 98; claims 154-156 further refine the definitions of the various components, as recited in the specification and earlier claims.

Claims 157-159 are analogous to previously presented claims 102, 104, and 106, but depend from new copolymer claim 153.

Accordingly, no new matter has been added, and entry of the amendments and new claims is therefore proper.

B. The Requirement for Restriction:

Group (I), Claims 67-110, drawn to a fluorinated silsesquioxane polymer, a fluorinated silsesquioxane copolymer, and a photoresist composition thereof;

Group (II), Claims 111-118, drawn to a process for using the polymer and copolymer in generating a resist image on a substrate; and;

Group (III), Claims 119-124, drawn to a process for using the polymer and copolymer in forming a patterned material structure on a substrate.

Applicants elect Group (I) without traverse. Note that nonelected claims 111-118 have been canceled.

If the Examiner has any questions concerning this communication, or would like to discuss the application, the art, or other pertinent matters as search and examination are initiated, she is invited to contact the undersigned attorney at (650) 330-0900.

Respectfully submitted,

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